

DETAILED ACTION

Claim Objections

1. Claims 38 is objected to because of the following informality:

(1) Claim 38 is currently dependent on claim 44. Based on the flow of other claims and the subject matter involved, claim 38 should be dependent on claim 37.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent thereof, subject to the conditions and requirements of this title.

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005), Annex IV reads as follows:

Claims that recite nothing but the physical characteristics of a form of energy, such as a frequency, voltage, or the strength of a magnetic field, define energy or magnetism, per se, and as such are nonstatutory natural phenomena. O'Reilly, 56 U.S. (15 How.) at 112-14. Moreover, it does not appear that a claim reciting a signal encoded with functional descriptive material falls within any of the categories of patentable subject matter set forth in Sec. 101.

... a signal does not fall within one of the four statutory classes of Sec. 101

... signal claims are ineligible for patent protection because they do not fall within any of the four statutory classes of Sec. 101.

Claims 1 - 90 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows.

Claims 1 - 50 and 81 – 90 define a “file” with descriptive material.

A “file” embodying functional descriptive material is neither a process nor a product (i. e. a tangible “thing”) and therefore does not fall into one of the four statutory class of 101. Rather a “file” is a form of energy, in the absence of any physical structure or a tangible material.

Because the full scope of the claim as properly read in light of the disclosure encompasses non- statutory subject matter, the claim as a whole is non-statutory. The examiner suggests amending the claim to include the disclosed tangible readable computer readable media, while at the same time excluding the intangible media such as software, signals, carrier waves, etc. Any amendment to the claim should be commensurate with its corresponding disclosure.

Claims 51 - 80 define “medium” with descriptive material. While “functional descriptive material” may be claimed as a statutory product (i.e., a “manufacture”) while embodied on a tangible computer readable medium, recording medium embodying that same functional descriptive material is neither a process nor a product (i.e., a tangible “thing”) and therefore does not fall within one of the four statutory class of §101. Rather, “medium” is a form of energy, in the absence of any physical structure or tangible material. Examiner recommends changing “A medium having a file stored thereon.....” to “A computer readable medium on which a program is recorded having a file stored thereon”.

When nonfunctional descriptive material is recorded on some computer-readable medium, in a computer or on an electromagnetic carrier signal, it is not statutory since no requisite functionality is present to satisfy the practical application requirement. Merely claiming nonfunctional descriptive material, i.e., abstract ideas, stored on a computer- readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Luken et al (US 6988144) in view of B. Millner (US 2004/0021684)

Regarding **claim 1**, Luken et al discloses a file having at least one video track, the file including a video stream descriptor list comprising:

a video stream header chunk (fig 2, col 1, lines 42 – 50 and fig 4, col 3, lines 17 – 40)

a video stream format chunk following said video stream header chunk (fig 10, col 10, lines 41 – 58)

video stream in a video track (col 3, lines 14 – 40 , video track)

However Luken et al does not disclose a video stream name chunk including a string indicating a video stream

On the other hand B. Millner teaches a video stream name chunk (para 0028, name) including a string indicating a video stream (para 0062, string)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate a video stream name chunk including a string indicating a video stream as taught by B. Millner in the system of Luken et al in order to provide interactivity with a digital video stream.

8. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luken et al (US 6988144) in view of B. Millner (US 2004/0021684) and further in view of Alcove et al (US 2004/0143760)

Regarding **claim 2**, Luken et al discloses video stream format chunk following said video stream header data chunk in said video stream descriptor list (see claim 1 above)

However Luken et al and B. Millner do not disclose video stream descriptor list further comprising a video stream header data chunk in response to said at least one video track being a digital rights management (DRM) protected video

On the other hand Alcove et al teaches video stream descriptor list further comprising a video stream header data chunk in response to said at least one video track being a digital rights management (DRM) (para 0028, DRM) protected video (para 0002, protection)

It would have been obvious to one of ordinary skill in the art at the time of the

invention to incorporate video stream descriptor list further comprising a video stream header data chunk in response to said at least one video track being a digital rights management (DRM) protected video as taught by Alcove et al in the combined system of Luken et al and B. Millner in order to provide protection for content owners and distributors.

Regarding **claim 3**, Luken et al and B. Millner disclose all of the above except, said video stream header data chunk in said video stream descriptor list including a DRM information data block comprising: a first member specifying a version of the DRM; and a second member specifying a protection of the DRM.

On the other hand Alcove et al teaches video stream header data chunk in said video stream descriptor list including a DRM information data block comprising: a first member specifying a version of the DRM (para 0006, version) and a second member specifying a protection of the DRM (para 0002, protection)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate video stream header data chunk in said video stream descriptor list including a DRM information data block comprising: a first member specifying a version of the DRM and a second member specifying a protection of the DRM as taught by Alcove et al in the combined system of Luken et al and B. Millner in order to provide protection for content owners and distributors.

9. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Luken et al (US 6988144) in view of B. Millner (US 2004/0021684) and further in view of Alcove et al (US 2004/0143760) and still further in view of Tadayon et al (US 2002/0184159)

Regarding **claim 5**, Luken et al, B. Millner and Alcove et al disclose all of the above except said second member of said DRM information data block in said video stream header data chunk including an encrypted binary string.

On the other hand Tadayon et al teaches second member of said DRM information data block (para 0019, DRM) in said video stream header data chunk including an encrypted binary string (para 0041)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate second member of said DRM information data block in said video stream header data chunk including an encrypted binary string as taught by Tadayon et al in the combined system of Luken et al, B. Millner and Alcove et al in order to protect digital works and make it more difficult to copy them without authorization.

10. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Luken et al (US 6988144) in view of B. Millner (US 2004/0021684) and further in view of Lyu (US 6917652)

Regarding **claim 6**, Luken et al and B. Millner disclose all of the above except a four character code "vids" specifying video stream data in said at least one video track.

On the other hand Lyu teaches a four character code "vids" specifying video stream data in said at least one video track (col 3, lines 45 – 48, vids)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate a four character code "vids" specifying video stream data in

said at least one video track as taught by Lyu in the combined system of Luken et al and B. Millner in order to significantly reduce memory size.

11. Claims 7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luken et al (US 6988144) in view of B. Millner (US 2004/0021684) and further in view of Reid (US 5844575)

Regarding **claim 7**, Luken et al and B. Millner disclose all of the above except data having a BITMAPINFOHEADER structure specifying a format of said at least one video track.

On the other hand Reid teaches data having a BITMAPINFOHEADER structure specifying a format of said at least one video track (col 10, lines 18 – 25 and col 1, lines 46 – 50)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate data having a BITMAPINFOHEADER structure specifying a format of said at least one video track as taught by Reid in the combined system of Luken et al and B. Millner in order to provide a complete definition of dimensions and colors of the video frame.

Regarding **claim 9**, Luken et al, B. Millner and Reid disclose all of the above except version of the file.

On the other hand Reid further teaches version of the file (col 10, lines 18 – 25)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate version of the file as taught by Reid in the combined system of Luken et al and B. Millner in order to provide a better control of dimensions and colors

of the video frame.

12. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Luken et al (US 6988144) in view of B. Millner (US 2004/0021684) and further in view of Reid (US 5844575) and still further in view of Fuhrer (US 6395969)

Regarding **claim 8**, Luken et al, B. Millner and Reid disclose all of the above except palette information of said at least one video track.

On the other hand Fuhrer teaches palette information of said at least one video track (col 4, lines 23 – 34)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate palette information of said at least one video track as taught by Fuhrer in the combined system of Luken et al, B. Millner and Reid in order to synchronize video tracks.

13. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luken et al (US 6988144) in view of B. Millner (US 2004/0021684) and further in view of Zintel et al (US 6725281)

Regarding **claim 10**, Luken et al and B. Millner disclose all of the above except a null terminated text string "Video".

On the other hand Zintel et al teaches a null terminated text string "Video" (col 33, lines 26 – 32, illustrates containing body of event message)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate a null terminated text string "Video" as taught by Zintel et al in the combined system of Luken et al and B. Millner in order to present a consistent and

correct depiction of the controlled device's state in their user interface.

Regarding **claim 11**, Luken et al and B. Millner disclose all of the above except a description field describing said at least one video track.

On the other hand Zintel et al teaches a description field describing said at least one video track (col 18, lines 45 – 50, illustrates containing header fields)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate a null terminated text string "Video" as taught by Zintel et al in the combined system of Luken et al and B. Millner in order to present a consistent and correct depiction of the controlled device's state in their user interface.

14. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luken et al (US 6988144) in view of B. Millner (US 2004/0021684) and further in view of Toebe VIII et al (US 5959690) and further in view of Prasad (US 5627936) and still further in view of Savchuck (US 2005/0055399)

Regarding **claim 12**, Luken et al and B. Millner disclose all of the above except a video stream data list comprising:

at least one data chunk identified by a two digit stream index number followed by a two character code, said two character code being "db" in response to said least one data chunk being an uncompressed video frame and being "dc" in response to said least one data chunk being a compressed video frame; and

in response to said at least one data chunk being a digital rights management (DRM) protected video frame, a DRM data chunk identified by said two digit stream index number followed by a two character code "dd", said DRM data chunk preceding

said at least one data chunk and having DRM protection information.

On the other hand Toebe VIII et al teaches at least one data chunk (col 10, lines 22 – 26, chunk) identified by a two digit stream index number (fig 3, col 26, lines 52 – 63, stream index) followed by a two character code, said two character code being "dc" (col 21, line 59 to col 22, line 7, code) in response to said least one data chunk being an a compressed video frame (col 7, lines 374 – 40, compressed)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate at least one data chunk identified by a two digit stream index number followed by a two character code, said two character code being "dc" in response to said least one data chunk being an a compressed video frame as taught by Toebe VIII et al in the combined system of Luken et al and B. Millner in order to provide a frame accurate access to the MPEG video stream at any frame.

The combination of Luken et al, B. Millner and Toebe VIII et al does not disclose data chunk being an uncompressed video frame

On the other hand Prasad teaches data chunk being an uncompressed video frame (col 2, lines 14 – 31, video frame is uncompressed)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate data chunk being an uncompressed video frame as taught by Prasad in the combined system of Luken et al, B. Millner and Toebe VIII et al in order to provide for event tagging for synchronizing and storing a set of multiple A/V/D streams in a single file.

Regarding **claim 13**, Luken et al, B. Millner, Toebe VIII et al and Savchuck

disclose all of the above except at least one data chunk in said video stream data list including data for one video frame.

On the other hand Prasad teaches at least one data chunk in said video stream data list including data for one video frame (col 7, line 51 to col 8, line 5)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate at least one data chunk in said video stream data list including data for one video frame as taught by Prasad in the combined system of Luken et al, B. Millner, Toebe VIII et al and Savchuck in order to provide for event tagging for synchronizing and storing a set of multiple A/V/D streams in a single file.

15. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Luken et al (US 6988144) in view of B. Millner (US 2004/0021684) and further in view of Toebe VIII et al (US 5959690) and further in view of Prasad (US 5627936) and still further in view of Savchuck (US 2005/0055399) and still further in view of Parkkinen et al (US 2003/0206558)

Regarding **claim 14**, Luken et al, B. Millner, Toebe VIII et al, Prasad and Savchuck disclose all of the above except an encoded data having a bidirectional frame and a following predicting frame.

On the other hand Parkkinen et al teaches an encoded data (para 0055 and 0056) having a bidirectional frame (para 0079) and a following predicting frame (para 0073)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate an encoded data having a bidirectional frame and a following

predicting frame as taught by Parkkinen et al in the combined system of Luken et al, B. Millner, Toebe VIII et al, Prasad and Savchuck in order to efficiently transmit several media streams simultaneously

16. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Luken et al (US 6988144) in view of B. Millner (US 2004/0021684) and further in view of Toebe VIII et al (US 5959690) and further in view of Prasad (US 5627936) and still further in view of Savchuck (US 2005/0055399) and still further in view of Parkkinen et al (US 2003/0206558) and yet still further in view of Bauchspies (US 5675382)

Regarding **claim 15**, Luken et al, B. Millner, Toebe VIII et al, Prasad, Savchuck and Parkkinen et al disclose all of the above except at least one data chunk (col 17, lines 16 – 27, data chunk) in said video stream data list further including an uncoded frame following said encoded data chunk (col 18, lines 13 – 26, data chunk in resulting compressed video stream)

On the other hand Bauchspies teaches at least one data chunk (col 17, lines 16 - 27, data chunk) in said video stream data list further including an uncoded frame following said encoded data chunk (col 18, lines 13 – 26, data chunk in resulting compressed video stream)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate at least one data chunk in said video stream data list further including an uncoded frame following said encoded data chunk as taught by Bauchspies in the combined system of Luken et al, B. Millner, Toebe VIII et al, Prasad, Parkkinen et al and Savchuck in order to provide a systems that compress

high-resolution video data so that it can be stored and transmitted more easily.

17. Claims 16, 18 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luken et al (US 6988144) in view of B. Millner (US 2004/0021684) and further in view of Hamilton et al (US 2006/0274835) and still further in view of Fujinami et al (2002/0191960)

Regarding **claim 16**, Luken et al and B. Millner disclose all of the above except having at least one audio track and including an audio stream descriptor list comprising:

an audio stream header chunk; an audio stream format chunk following said audio stream header chunk; and an audio stream name chunk including a string indicating an audio stream in said at least one audio track.

On the other hand Hamilton et al teaches having at least one audio track and including an audio stream descriptor list comprising:

an audio stream header chunk (para 0201, header and para 0225, chunk)

an audio stream format chunk (para 0143 and 0176) following said audio stream header chunk (para 0201)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate having at least one audio track and including an audio stream descriptor list comprising: an audio stream header chunk; an audio stream format chunk following said audio stream header chunk as taught by Hamilton et al in the combined invention of Luken et al and B. Millner in order to provide encapsulation of audio stream into AVI files.

The combination of Luken et al, B. Millner and Hamilton et al does not disclose an audio stream name chunk including a string indicating an audio stream in said at least one audio track.

On the other hand Fujinami et al teaches an audio stream name chunk 9para 0174, name) including a string (para 0251 ,string) indicating an audio stream in said at least one audio track (para 140 , track)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate an audio stream name chunk including a string indicating an audio stream in said at least one audio track as taught by Fujinami et al in the combined system of Luken et al, B. Millner and Hamilton et al in order to record without deterioration of the quality.

Regarding **claim 18**, Luken et al, B. Millner, and Fujinami et al disclose all of the above except data having a WAVEFORMAT structure specifying a format of said at least one audio track.

On the other hand Hamilton et al teaches specifying a format of said at least one audio track (para 0201)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate specifying a format of said at least one audio track as taught by Hamilton et al in the combined system of Luken et al, B. Millner and Fujinami et al in order to provide encapsulation of audio stream into AVI files.

Claim 27 is rejected based on claim 16 above with the added limitation of chapter as disclosed by Hamilton et al (para 0158)

18. Claims 17 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luken et al (US 6988144) in view of B. Millner (US 2004/0021684) and further in view of Hamilton et al (US 2006/0274835) and still further in view of Fujinami et al (2002/0191960) and yet still further in view of Mark (US 5907597)

Regarding **claim 17**, Luken et al, B. Millner, Hamilton et al and Fujinami et al disclose all of the above except a four character code "auds" specifying audio stream data

On the other hand Mark teaches a four character code "auds" specifying audio stream data (col 11, lines 39 – 63)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate a four character code "auds" specifying audio stream data as taught by Mark in the combined system of Luken et al, B. Millner, Hamilton et al and Fujinami et al in order to improve user-authentication system that includes a user-activated authorized user device (AUD)

Claim 28 is rejected based on claim 17 above.

19. Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luken et al (US 6988144) in view of B. Millner (US 2004/0021684) and further in view of Hamilton et al (US 2006/0274835) and still further in view of Fujinami et al (2002/0191960) and still further in view of Zintel et al (US 6725281)

Regarding **claim 19**, Luken et al, B. Millner, Hamilton et al and Fujinami et al disclose all of the above except a null terminated text string "Audio".

On the other hand Zintel et al teaches a null terminated text string "Audio" (col

33, lines 26 – 32, illustrates containing body of event message)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate a null terminated text string "Audio" as taught by Zintel et al in the combined system of Luken et al, B. Millner, Hamilton et al and Fujinami et al in order to present a consistent and correct depiction of the controlled device's state in their user interface.

Regarding **claim 20**, Luken et al, B. Millner, Hamilton et al and Fujinami et al disclose all of the above except a description field describing said at least one video track.

On the other hand Zintel et al teaches a description field describing said at least one video track (col 18, lines 45 – 50, illustrates containing header fields)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate a null terminated text string "Video" as taught by Zintel et al in the combined system of Luken et al, B. Millner, Hamilton et al and Fujinami et al in order to present a consistent and correct depiction of the controlled device's state in their user interface.

20. Claims 21, 22, 32 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luken et al (US 6988144) in view of B. Millner (US 2004/0021684) and further in view of Hamilton et al (US 2006/0274835) and still further in view of Fujinami et al (2002/0191960) and still further in view of Toebes VIII et al (US 5959690)

Regarding **claim 21**, Luken et al, B. Millner, Hamilton et al and Fujinami et al disclose all of the above except at least one data chunk identified by a two digit stream

index number followed by a two character code.

On the other hand Toebes VIII et al teaches at least one data chunk (col 10, lines 22 – 26, chunk) identified by a two digit stream index number (fig 3, col 26, lines 52 – 63, stream index) followed by a two character code (col 21, line 59 to col 22, line 7, code)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate at least one data chunk identified by a two digit stream index number followed by a two character code as taught by Toebes VIII et al in the combined system of Luken et al, B. Millner, Hamilton et al and Fujinami et al in order to provide a frame accurate access to the MPEG video stream at any frame.

Regarding **claim 22**, Luken et al, B. Millner, Hamilton et al and Fujinami et al disclose all of the above except two character code following said two digit stream index number in said audio stream data list being "wb".

On the other hand Toebes VIII et al teaches two character code following said two digit stream index number in said audio stream data list being "wb" (col 21, line 59 to col 22, line 7, code)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate two character code following said two digit stream index number in said audio stream data list being "wb" as taught by Toebes VIII et al in the combined system of Luken et al, B. Millner, Hamilton et al and Fujinami et al in order to provide a frame accurate access to the MPEG video stream at any frame.

Claim 32 is rejected based on claim 21 above.

Claim 33 is rejected based on claim 22 above.

21. Claims 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luken et al (US 6988144) in view of B. Millner (US 2004/0021684) and further in view of Hamilton et al (US 2006/0274835) and still further in view of Fujinami et al (2002/0191960) and still further in view of Toebe VIII et al (US 5959690) and still further in view of Ferris et al (US 2004/0114687)

Regarding **claim 23**, Luken et al, B. Millner, Hamilton et al, Fujinami et al and Toebe VIII et al disclose all of the above except data for one audio frame in variable bit rate coding.

On the other hand Ferris et al teaches data for one audio frame in variable bit rate coding (para 0018, VBR)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate data for one audio frame in variable bit rate coding as taught by Ferris et al in the combined system of Luken et al, B. Millner, Hamilton et al, Fujinami et al and Toebe VIII et al in order to improve insertion of data in audio frame.

Regarding **claim 24**, Luken et al, B. Millner, Hamilton et al and Fujinami et al and Toebe VIII et al disclose all of the above except data for one audio frame in constant bit rate coding.

On the other hand Ferris et al teaches data for one audio frame in constant bit rate coding (para 0018, CBR)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate data for one audio frame in constant bit rate coding as taught

by Ferris et al in the combined system of Luken et al, B. Millner, Hamilton et al, Fujinami et al and Toebe VIII et al in order to improve insertion of data in audio frame.

22. Claims 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luken et al (US 6988144) in view of B. Millner (US 2004/0021684) and further in view of Hamilton et al (US 2006/0274835) and still further in view of Fujinami et al (2002/0191960) and still further in view of Toebe VIII et al (US 5959690) and still further in view of Nelson et al (US 5719786)

Regarding **claim 25**, Luken et al, B. Millner, Hamilton et al, Fujinami et al and Toebe VIII et al disclose all of the above except one audio track is interleaved with said at least one video track.

On the other hand Ferris et al teaches one audio track is interleaved with said at least one video track (col 11, lines 4 – 20. audio and video interleave)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate one audio track is interleaved with said at least one video track as taught by Ferris et al in the combined system of Luken et al, B. Millner, Hamilton et al, Fujinami et al and Toebe VIII et al in order to improve control of starting and stopping of sequence presentation in response to user specifications.

Regarding **claim 26**, Luken et al, B. Millner, Hamilton et al, Fujinami et al and Toebe VIII et al disclose all of the above except one audio track is interleaved ahead of said at least one video track by a time interval.

On the other hand Ferris et al teaches one audio track is interleaved ahead of said at least one video track by a time interval (col 13, lines 44 – 53, ahead)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate one audio track is interleaved with said at least one video track as taught by Ferris et al in the combined system of Luken et al, B. Millner, Hamilton et al, Fujinami et al and Toebe VIII et al in order to improve control of starting and stopping of sequence presentation in response to user specifications.

23. Claims 30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luken et al (US 6988144) in view of B. Millner (US 2004/0021684) and further in view of Zintel et al (US 6725281) and further in view of Hamilton et al (US 2006/0274835) and still further in view of Fujinami et al (2002/0191960)

Regarding **claim 30**, see examiners rejection for claim 10 above

Regarding **claim 31**, see examiners rejection for claim 11 above

24. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Luken et al (US 6988144) in view of B. Millner (US 2004/0021684) and further in view of Tsukagoshi (US 5684542)

Regarding **claim 36**, Luken et al and B. Millner disclose all of the above except subtitle stream

On the other hand Tsukagoshi teaches subtitle stream (col 15, line 36 to col 16, line 37)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate subtitle stream as taught by Tsukagoshi in the combined system of Luken et al and B. Millner in order to freely change the subtitle display range to any range without modifying the basic structure of the subtitle data encoding unit.

25. Claims 37 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luken et al (US 6988144) in view of B. Millner (US 2004/0021684) and further in view of Hamilton et al (US 2006/0274835) and still further in view of Fujinami et al (2002/0191960) and still further in view of Toebe VIII et al (US 5959690) and still further in view of Nelson et al (US 5719786) and still further in view of Tsukagoshi (US 5684542)

Regarding **claim 37**, see examiners rejection for claim 25 above

Regarding **claim 38**, see examiners rejection for claim 26 above

26. Claims 39, 40 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luken et al (US 6988144) in view of B. Millner (US 2004/0021684) and further in view of Hamilton et al (US 2006/0274835) and still further in view of Fujinami et al (2002/0191960) and yet still further in view of Mark (US 5907597) and still further in view of Tsukagoshi (US 5684542)

Regarding **claim 39, 40 and 42**, see examiners rejection for claim 17 above

27. Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Luken et al (US 6988144) in view of B. Millner (US 2004/0021684) and further in view of Hamilton et al (US 2006/0274835) and still further in view of Fujinami et al (2002/0191960) and yet still further in view of Mark (US 5907597) and further in view of Reid (US 5844575) and still further in view of Tsukagoshi (US 5684542)

Regarding **claim 43**, see examiners rejection for claims 7 and 36 above

28. Claims 44 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luken et al (US 6988144) in view of B. Millner (US 2004/0021684) and further in view of Zintel et al (US 6725281) and still further in view of Tsukagoshi (US 5684542)

Regarding **claim 44**, see examiners rejection for claim 10 above

Regarding **claim 45**, see examiners rejection for claim 11 above

29. Claims 46, 47 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luken et al (US 6988144) in view of B. Millner (US 2004/0021684) and further in view of Toebe VIII et al (US 5959690) and further in view of Prasad (US 5627936) and still further in view of Savchuck (US 2005/0055399) and still further in view of Tsukagoshi (US 5684542)

Regarding **claim 46, 47 and 48** see examiners rejection for claim 12 above

30. Claims 51, 56, 57, 63, 64, 65, 68, 71 and 72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luken et al (US 6988144) in view of B. Millner (US 2004/0021684) and further in view of Hamilton et al (US 2006/0274835) and still further in view of Fujinami et al (2002/0191960) and further in view of Zintel et al (US 6725281)

Regarding **claim 51**, see examiners rejection for claims 1, 10 and 16 above

Regarding **claim 56, 64 and 71** see examiners rejection for claims 10 above

Regarding **claim 57, 65 and 72** see examiners rejection for claims 11 above

Regarding **claim 63** see examiners rejection for claims 18 above

Regarding **claim 68** see examiners rejection for claims 27 above

31. Claim 52 is rejected under 35 U.S.C. 103(a) as being unpatentable over Luken et al (US 6988144) in view of B. Millner (US 2004/0021684) and further in view of Hamilton et al (US 2006/0274835) and still further in view of Fujinami et al (2002/0191960) and further in view of Zintel et al (US 6725281) and still further in view of Itoh et al (US 2006/0093323)

Regarding **claim 52**, Luken et al, B. Millner, Hamilton et al, Fujinami et al and Zintel et al disclose all of the above except interleave time interval of approximately 10 seconds.

On the other hand Itoh et al teaches interleave time interval of approximately 10 seconds (para 0203)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate interleave time interval of approximately 10 seconds as taught by Itoh et al in the combined system of Luken et al, B. Millner, Hamilton et al, Fujinami et al and Zintel et al in order to comply with a predetermined standard.

32. Claims 53, 62 and 76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luken et al (US 6988144) in view of B. Millner (US 2004/0021684) and further in view of Hamilton et al (US 2006/0274835) and still further in view of Fujinami et al (2002/0191960) and yet still further in view of Mark (US 5907597) and further in view of Zintel et al (US 6725281)

Regarding **claim 53, 62 and 69** see examiners rejection for claims 17 above

33. Claim 54 is rejected under 35 U.S.C. 103(a) as being unpatentable over Luken et al (US 6988144) in view of B. Millner (US 2004/0021684) and further in view of Hamilton

et al (US 2006/0274835) and still further in view of Fujinami et al (2002/0191960) and further in view of Zintel et al (US 6725281) and still further in view of Reid (US 5844575)

Regarding **claim 54**, see examiners rejection for claims 7 above

34. Claim 55 is rejected under 35 U.S.C. 103(a) as being unpatentable over Luken et al (US 6988144) in view of B. Millner (US 2004/0021684) and further in view of Hamilton et al (US 2006/0274835) and still further in view of Fujinami et al (2002/0191960) and further in view of Zintel et al (US 6725281) and still further in view of Reid (US 5844575) and still further in view of Fuhrer (US 6395969)

Regarding **claim 55**, see examiners rejection for claims 8 above

35. Claim 58 is rejected under 35 U.S.C. 103(a) as being unpatentable over Luken et al (US 6988144) in view of B. Millner (US 2004/0021684) and further in view of Hamilton et al (US 2006/0274835) and still further in view of Fujinami et al (2002/0191960) and further in view of Zintel et al (US 6725281) and further in view of Toebe VIII et al (US 5959690) and further in view of Prasad (US 5627936) and still further in view of Savchuck (US 2005/0055399)

Regarding **claim 58**, see examiners rejection for claims 13 above

36. Claims 66 and 67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luken et al (US 6988144) in view of B. Millner (US 2004/0021684) and further in view of Hamilton et al (US 2006/0274835) and still further in view of Fujinami et al (2002/0191960) and further in view of Zintel et al (US 6725281) and still further in view

of Toebe VIII et al (US 5959690) and still further in view of Ferris et al (US 2004/0114687)

Regarding **claim 66**, see examiners rejection for claims 23 above

Regarding **claim 67**, see examiners rejection for claims 24 above

37. Claim 75, 78 and 79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luken et al (US 6988144) in view of B. Millner (US 2004/0021684) and further in view of Hamilton et al (US 2006/0274835) and still further in view of Fujinami et al (2002/0191960) and further in view of Zintel et al (US 6725281) and still further in view of Tsukagoshi (US 5684542) and further in view of Toebe VIII et al (US 5959690) and further in view of Prasad (US 5627936) and still further in view of Savchuck (US 2005/0055399)

Regarding **claim 75**, see examiners rejection for claims 12 and 36 above

Regarding **claim 78**, see examiners rejection for claim 10 above.

Regarding **claim 79**, see examiners rejection for claim 11 above.

38. Claim 76 is rejected under 35 U.S.C. 103(a) as being unpatentable over Luken et al (US 6988144) in view of B. Millner (US 2004/0021684) and further in view of Hamilton et al (US 2006/0274835) and still further in view of Fujinami et al (2002/0191960) and further in view of Zintel et al (US 6725281) and still further in view of Tsukagoshi (US 5684542) and further in view of Toebe VIII et al (US 5959690) and further in view of Prasad (US 5627936) and in view of Savchuck (US 2005/0055399) and still further in view of Mark (US 5907597)

Regarding **claim 76**, see examiners rejection for claim 17 above.

39. Claims 81 and 82 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prasad (US 5627936) in view of Luken et al (US 6988144) in view of B. Millner (US 2004/0021684) and further in view of Alcove et al (US 2004/0143760) and further in view of Toebes VIII et al (US 5959690) and further in view of Savchuck (US 2005/0055399) and further in view of Hamilton et al (US 2006/0274835) and further in view of Fujinami et al (2002/0191960) and further in view of Tsukagoshi (US 5684542)

Regarding **claim 81**, Prasad discloses an audio video interleave (AVI) file executable by a processor (fig 5, col 9, lines 25 – 44, interleave and fig 1, 116, processor) comprising:

a video stream, including: a video stream descriptor list comprising a video stream header chunk, a video stream format chunk, a video stream header data chunk in response to said video stream being digital rights management (DRM) protected, and a video stream name chunk (see claim 1 above for video stream and claim 2 above for DRM) and

a video stream data list comprising a plurality of video data chunks, each video data chunk identified by a two digit stream index number followed by a two character code, said two character code being "db" in response to the video data chunk being an uncompressed video frame and being "dc" in response to the video data chunk being a compressed video frame (see claim 12 above)

an audio stream interleaved ahead of said video stream (see claim 16 above for audio stream and Prasad disclosure for interleave) including:

an audio stream descriptor list comprising an audio stream header chunk, an audio stream format chunk, and an audio stream name chunk (see claim 16 above) and

an audio stream data list comprising a plurality of audio data chunks, each identified by a two digit stream index number followed by a two character code "wb"; (see claim 21 and 22 above) and a subtitle stream interleaved ahead of said video stream (see claim 36 above for subtitle stream and Prasad disclosure for interleave) including:

a subtitle stream descriptor list comprising a subtitle stream header chunk, a subtitle stream format chunk, and a subtitle stream name chunk (see claim 36 above) and

a subtitle stream data list comprising a plurality of subtitle data chunks, each identified by a two digit stream index number followed by a two character code, said two character code being "st" in response to a text form subtitle and "sb" in response to a bitmap form subtitle (see claim 46, 47 and 48 above)

Regarding **claim 82**, Prasad discloses the AVI file (see claim 81 above) wherein, in response to a video data chunk in said video stream data list being DRM protected, said video stream data list includes a DRM data chunk preceding said video data chunk, said DRM data chunk having DRM protection information and being identified by a two digit stream index number followed by a two character code "dd" (see claim 1 for video data, claim 2 above for DRM and claim 12 above for code)

40. Claims 83 and 84 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prasad (US 5627936) in view of Luken et al (US 6988144) in view of B. Millner (US 2004/0021684) and further in view of Alcove et al (US 2004/0143760) and further in view of Toebe VIII et al (US 5959690) and further in view of Savchuck (US 2005/0055399) and further in view of Hamilton et al (US 2006/0274835) and further in view of Fujinami et al (2002/0191960) and further in view of Tsukagoshi (US 5684542) and still further in view of Ferris et al (US 2004/0114687)

Regarding **claim 83**, Prasad discloses the AVI file (see claim 81 above) wherein each of said plurality of audio data chunks in said audio stream data list includes data for one audio frame in variable bit rate coding (see claim 16 above for audio data and claim 23 for variable bit rate coding)

Regarding **claim 84**, Prasad discloses the AVI file (see claim 81 above) wherein each of said plurality of audio data chunks in said audio stream data list includes data for at least one audio frame in constant bit rate coding (see claim 16 above for audio data and claim 24 for constant bit rate coding)

41. Claim 85 is rejected under 35 U.S.C. 103(a) as being unpatentable over Prasad (US 5627936) in view of Luken et al (US 6988144) in view of B. Millner (US 2004/0021684) and further in view of Alcove et al (US 2004/0143760) and further in view of Toebe VIII et al (US 5959690) and further in view of Savchuck (US 2005/0055399) and further in view of Hamilton et al (US 2006/0274835) and further in view of Fujinami et al (2002/0191960) and further in view of Tsukagoshi (US 5684542) and further in view of Lyu (US 6917652) and further in view of Reid (US 5844575) and

further in view of Mark (US 5907597) and further in view of Zintel et al (US 6725281)
and yet further in view of Lee et al (US 2002/0062313)

Regarding **claim 85**, Prasad discloses the AVI file (see claim 81 above) wherein:

said video stream header chunk includes a four character code "vids" specifying
video stream data in said video stream (see claim 6 above)

said video stream format chunk includes data having a BITMAPINFOHEADER
structure specifying a format of said video stream (see claim 7 above)

said video stream name chunk includes a null terminated text string "Video" (See
claim 10 above)

said audio stream header chunk includes a four character code "auds" specifying
audio stream data in said audio stream (see claim 17 above)

said audio stream format chunk includes data having a WAVEFORMATEX
structure specifying a format of said audio stream (see claim 18 above)

said audio stream name chunk includes a null terminated text string "Audio" (see
claim 19 above)

said subtitle stream header chunk includes a four character code, said four
character code being "txts" in response to a text form subtitle and "vids" in response to
a bitmap form subtitle (see claim 40 and 42 above)

said subtitle stream format chunk includes, in response to a bitmap form subtitle,
data having a BITMAPINFOHEADER structure (see claim 43 above) and, in response
to a text form subtitle (see claim 40 above) data having a TEXTINFO structure; and
said subtitle stream name chunk includes a null terminated text string "Subtitle" (see

claim 44 above)

However the combination above does not disclose data having a TEXTINFO structure

On the other hand Lee et al discloses data having a TEXTINFO structure(para 0019)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate data having a TEXTINFO structure as taught by Itoh et al in the combined system of Luken et al, B. Millner, Hamilton et al, Fujinami et al and Zintel et al in order to add a caption function to the header.

42. Claims 86 and 87 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prasad (US 5627936) in view of Luken et al (US 6988144) in view of B. Millner (US 2004/0021684) and further in view of Alcove et al (US 2004/0143760) and further in view of Toebe VIII et al (US 5959690) and further in view of Savchuck (US 2005/0055399) and further in view of Hamilton et al (US 2006/0274835) and further in view of Fujinami et al (2002/0191960) and further in view of Tsukagoshi (US 5684542) and further in view of Lyu (US 6917652) and further in view of Reid (US 5844575) and further in view of Mark (US 5907597) and further in view of Zintel et al (US 6725281) and in view of Lee et al (US 2002/0062313) and yet further further in view of Fuhrer (US 6395969)

Regarding **claim 86**, Prasad discloses the AVI file (see claim 81 and 85 above) wherein said video stream format chunk further includes palette information of said video stream (see claim 8 above)

Regarding **claim 87**, Prasad discloses the AVI file (see claim 81 and 85 above) wherein:

said video stream name chunk in said video stream descriptor list further includes a description field describing said video stream (see claim 1 and 2 above)

said audio stream name chunk in said audio stream descriptor list further includes a description field describing said audio stream (see claim 16 and 17 above) and

said subtitle stream name chunk in said subtitle stream descriptor list further includes a description field describing said subtitle stream (see claim 36 and 39 above)

43. Claim 88 is rejected under 35 U.S.C. 103(a) as being unpatentable over Prasad (US 5627936) in view of Luken et al (US 6988144) in view of B. Millner (US 2004/0021684) and further in view of Alcove et al (US 2004/0143760) and further in view of Toebe VIII et al (US 5959690) and further in view of Savchuck (US 2005/0055399) and further in view of Hamilton et al (US 2006/0274835) and further in view of Fujinami et al (2002/0191960) and further in view of Tsukagoshi (US 5684542) and still further in view of Zintel et al (US 6725281)

Regarding **claim 88**, Prasad discloses the AVI file (see claim 81 above) wherein each of said plurality of video data chunks in said video stream data list includes data for one video frame (see claim 58 above)

44. Claim 89 is rejected under 35 U.S.C. 103(a) as being unpatentable over Prasad (US 5627936) in view of Luken et al (US 6988144) in view of B. Millner (US 2004/0021684) and further in view of Alcove et al (US 2004/0143760) and further in

view of Toebe VIII et al (US 5959690) and further in view of Savchuck (US 2005/0055399) and further in view of Hamilton et al (US 2006/0274835) and further in view of Fujinami et al (2002/0191960) and further in view of Tsukagoshi (US 5684542) and still further in view of Parkkinen et al (US 2003/0206558) and yet still further in view of Bauchspies (US 5675382)

Regarding **claim 89**, Prasad discloses the AVI file (see claim 81 above) wherein said plurality of video data chunk in said video stream data list include:

- an encoded data chunk having a bidirectional frame and a following predicting frame (see claim 14 above) and
- an uncoded frame following said encoded data chunk (see claim 15 above)

Allowable Subject Matter

45. Claims 4, 29, 34, 35, 41, 49, 50, 59, 60, 61, 70, 73, 74, 77, 80 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and amended to overcome the rejection(s) under 35 U.S.C. 101, and 35 U.S.C. 103 set forth in this Office action.

Regarding **claim 4**, the prior art of record fails to teach, disclose or fairly suggest as recited in claim 4, the prior art fails to disclose the file, said DRM information data block in said video stream header data chunk having a data structure defined as:

```
typedef _DRMInfo [ WORD wVersion; STR sDRMInfo; ] DRMINFO.
```

Regarding **claim 29**, the prior art of record fails to teach, disclose or fairly

suggest as recited in claim 29, the prior art fails to disclose the file, said chapter stream format chunk in said chapter stream descriptor list including data having a TEXTINFO structure specifying a format of said at least one chapter track, said TEXTINFO structure being:

```
typedef _textinfo [ WORD wCodePage; WORD wCountryCode; WORD  
wLanguageCode; WORD wDialect ] TEXTINFO.
```

Regarding **claim 34**, the prior art of record fails to teach, disclose or fairly suggest as recited in claim 34, the prior art fails to disclose the file, said data chunk in said chapter stream data list having a structure defined as:

```
typedef struct _chapterchunk [ FOURCC fcc; DWORD cb; STR time; STR  
description ) CHAPTERCHUNK
```

wherein:

the fcc element specifies a four character code "nnxx";

the cb element specifies a size of said structure;

the time element specifies a starting time of said at least one chapter track; and

the description element specifies a description of said at least one chapter track.

Regarding **claim 41**, the prior art of record fails to teach, disclose or fairly suggest as recited in claim 41, the prior art fails to disclose the file, said subtitle stream format chunk in said chapter stream descriptor list including data having a TEXTINFO structure specifying a format of said at least one subtitle track, said TEXTINFO structure being:

```
typedef _textinfo [ WORD wCodePage; WORD wCountryCode; WORD  
wLanguageCode; WORD wDialect ] TEXTINFO.
```

Regarding **claim 49**, the prior art of record fails to teach, disclose or fairly suggest as recited in claim 49, the prior art fails to disclose the file, said data chunk in said subtitle stream data list having a structure defined as:

```
typedef struct _subtitlechunk [ FOURCC fcc; DWORD cb; STR duration; STR  
subtitle ) SUBTITLECHUNK
```

wherein:

the fcc element specifies a four character code "nnxx";

the cb element specifies a size of said structure;

the time element specifies a starting time and a ending time of said at least one subtitle track; and

the subtitle element includes: a bitmap image in response to a bitmap form subtitle; and a unicode text in response to a text form subtitle.

Regarding **claim 59**, the prior art of record fails to teach, disclose or fairly suggest as recited in claim 59, the prior art fails to disclose the medium, said video stream descriptor list further comprising a video stream header data chunk in response to said at least one video stream being digital rights management (DRM) protected, said video stream header data chunk including a DRM information data block having a structure defined as:

```
typedef _DRMinfo [ WORD wVersion; STR sDRMinfo; ] DRMINFO
```

wherein: said element wVersion specifies a version of the DRM; and said element

sDRMInfo specifies a protection of the DRM.

Regarding **claim 70**, the prior art of record fails to teach, disclose or fairly suggest as recited in claim 70, the prior art fails to disclose the medium, said chapter stream format chunk in said chapter stream descriptor list including data having a TEXTINFO structure specifying a format of said at least one chapter stream, said TEXTINFO structure being:

```
typedef _textinfo [ WORD wCodePage; WORD wCountryCode; WORD  
wLanguageCode; WORD wDialect ] TEXTINFO.
```

Regarding **claim 73**, the prior art of record fails to teach, disclose or fairly suggest as recited in claim 73, the prior art fails to disclose the medium, said plurality of data chunks in said chapter stream data list having a structure defined as:

```
typedef struct _chapterchunk [ FOURCC fcc; DWORD cb; STR time; STR  
description ) CHAPTERCHUNK
```

wherein:

said fcc element specifies a four character code "nnxx";

said cb element specifies a size of said structure;

said time element specifies a starting time of said at least one chapter stream;

and said description element specifies a description of said at least one chapter stream.

Regarding **claim 77**, the prior art of record fails to teach, disclose or fairly

suggest as recited in claim 77, the prior art fails to disclose the medium, wherein:

in response to a bitmap form subtitle, said subtitle stream format chunk in said subtitle stream descriptor list includes data having a BITMAPINFOHEADER structure specifying a format of said at least one subtitle stream; and

in response to a text form subtitle, said subtitle stream format chunk in said subtitle stream descriptor list includes data having a TEXTINFO structure specifying a format of said at least one subtitle stream, said TEXTINFO structure being:

```
typedef _textinfo [ WORD wCodePage; WORD wCountryCode; WORD  
wLanguageCode; WORD wDialect ] TEXTINFO.
```

Regarding **claim 80**, the prior art of record fails to teach, disclose or fairly suggest as recited in claim 80, the prior art fails to disclose the medium, said plurality of data chunks in said subtitle stream data list having a structure:

```
typedef struct _subtitlechunk [ FOURCC fcc; DWORD cb; STR duration; STR  
subtitle ) SUBTITLECHUNK
```

wherein:

said fcc element specifies a four character code "nnxx";

said cb element specifies a size of said structure;

said time element specifies a starting time and a ending time of said at least one subtitle stream; and

said subtitle element includes:

a bitmap image in response to a bitmap form subtitle; and

a unicode text in response to a text form subtitle.

Regarding **claim 90**, the prior art of record fails to teach, disclose or fairly suggest as recited in claim 90, the prior art fails to disclose the AVI file, further comprising a chapter stream, including:

a chapter stream descriptor list comprising: a chapter stream header chunk having a four character code "txts";

a chapter stream format chunk having a TEXTINFO structure specifying a format of said chapter stream; and

a chapter stream name chunk having a null terminated text string "Chapter"; and

a chapter stream data list comprising a plurality of chapter data chunks, each identified by a two digit stream index number followed by a two character code "ch", said plurality of chapter data chunks having a structure:

typedef struct _chapterchunk [FOURCC fcc; DWORD cb; STR time; STR description) CHAPTERCHUNK wherein:

said fcc element specifies a four character code;

said cb element specifies a size of said structure;

said time element specifies a starting time of said at least one chapter stream;

and said description element specifies a description of said at least one chapter stream.

Claim 35 depends on claim 34.

Claim 50 depends on claim 49

Claims 60 and 61 depend on claim 59.

Conclusion

46. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Syed Y. Hasan whose telephone number is 571-270-1082. The examiner can normally be reached on 9/8/5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. Y. H./
05/27/2008

/Thai Tran/

Supervisory Patent Examiner, Art Unit 2621